IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Docket No. 15-IS-5713 (13033US01)

In the Application of:	
Thanos Karras	Examiner: Bleck, Carolyn M.
Serial No.: 09/681,306	Group Art Unit: 3626
Filed: March 15, 2001	Conf. No.: 9546
For: INTEGRATION OF MOBILE IMAGING UNITS INTO AN APPLICATION SERVICE PROVIDER FOR DATA STORAGE AND INFORMATION SYSTEM SUPPORT	April 30, 2008 Electronic Filing Date

REQUEST FOR REHEARING OF DECISION ON APPEAL PURSUANT TO 37 CFR 41.52

MAIL STOP: APPEAL BRIEF-PATENTS
Board of Patent Appeals and Interferences
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

Sir or Madam:

The Applicant respectfully requests that the Board of Patent Appeals and Interferences rehear and reconsider the decision on appeal issued March 31, 2008, based at least on the following particular points presented in the Applicants Appeal Brief and Reply Brief.

REMARKS

I. Points for Review

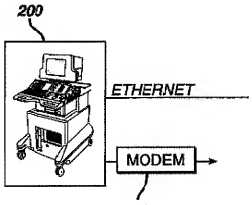
The Applicant focuses on a single claim construction point for review by the Board. That particular point is the definition and construction of the term "mobile facility" as described in the specification and recited in the claims of the present application in conjunction with the mobile imaging unit. The Board held in its Decision on Appeal that "the Specification does not provide a definition for the 'facility'." See, e.g., point 2 of the claim construction under Findings of Fact. The Applicant respectfully disagrees and asks that the Board reconsider this finding and its affect on the pending rejections based on the following specification support, re-iterated from previous submissions. More particularly, the Applicant submits that the Applicant's claim construction is supported by the Specification and prosecution history of the present application and serves to overcome the rejections outstanding against the pending claims.

A. The Term "Mobile Facility" is Defined and Described in the Specification

The Applicant respectfully submits that a facility, and more specifically a mobile facility such as a mobile imaging unit, is defined in the specification of the present application. Furthermore, the Applicant submits that through the prosecution history of the present application, including amendments, office action responses, and appeal briefs, the Applicant has disclaimed a claim scope that would include the cart of the Wood '035 reference (U.S. Patent No. 5, 891,035) without any surrounding mobile facility.

Thus, the Applicant requests rehearing and reconsideration of the support for the mobile facility and, as a result, the sustainability of the Examiner's current rejections, which depend on such a construction.

The Wood '035 patent discloses the following ultrasound system having wheels:



As illustrated in Fig. 2 above, Wood '035 describes a mobile ultrasound **cart** as opposed to a mobile imaging **unit** recited in the pending claims. While the Wood '035 reference discusses a wheeled cart that may be rolled around a hospital, the pending claims recite a mobile imaging unit, which is described as a mobile **facility** adapted to be used a plurality of locations. The mobile facility is defined in the specification as a vehicle, such as a truck or van, that includes imaging equipment, and the Applicant's specification supports a construction of a mobile imaging unit as a mobile facility or vehicle. This description and construction should be allowed to distinguish the mobile imaging unit described and claimed in the present application from the wheeled cart of Wood '035.

The Applicant invites the Board to review the evidence, taken from the Specification, defining a mobile imaging unit as a mobile facility. When given the broadest reasonable construction in light of the Specification as it would be interpreted by one of ordinary skill in the art and in view of the limiting affect of the applications' prosecution history, a clear definition of the mobile imaging unit, defined as a mobile facility adapted to be used at a plurality of locations, emerges as distinct from the wheeled ultrasound cart described in Wood '035.

For convenience, the Applicant reproduces sections from the Specification below, although these sections were original presented in the Applicant's Appeal and Reply briefs submitted for consideration in this case.

The present application describes a mobile imaging unit as follows:

> Many healthcare facilities, such as hospitals and clinics, employ mobile imaging units to facilitate medical examination of patients. **Mobile imaging units may include equipment for MR (magnetic resonance), CT (computerized tomography), and the like, to facilitate medical examination of patients**. Because hospitals and clinics may not have adequate facilities or funding to handle all patients and examinations, hospitals and clinics may hire or purchase mobile imaging units to help perform medical diagnostic examinations, for example MR and CT imaging. **The use of mobile imaging units helps to reduce patient overflow problems by providing healthcare facilities with additional resources for patient examination**. Additionally, the use of mobile imaging units may provide access to technologically advanced imaging solutions on a cost-effective basis.
>
> A typical mobile imaging unit may be scheduled among multiple healthcare facilities. **Mobile imaging units (typically large trucks or vans) are usually positioned outside the healthcare facility**. A patient may be sent from the hospital or clinic to the mobile unit. **An image may be taken of a patient (such as a MR or CT image) in the mobile unit. Currently, the patient image is manually processed in the mobile unit**. Commonly, the image is either printed on film or stored on media such as a floppy disk, CD-ROM, and the like. **The stored image is typically manually transported (often called "sneaker net" in the art) from the mobile imaging unit to the hospital or clinic where the image may be further processed or stored**. Alternatively, some mobile imaging units and hospitals transmit images from a mobile unit to a hospital or clinic via a cable network connection (such as an Ethernet connection in the parking lot).[1]

As defined explicitly in the first paragraph reproduced above, the mobile imaging units are **typically large trucks or vans**. A large truck or van, or their equivalent, would not include a wheeled cart. One cannot enter a wheeled cart as one can a truck or van, and one cannot move from location to location as one can in a truck or van. Additionally, a wheeled cart cannot include the equipment that can be included in a truck or van.

The Specification further defines the contents of the mobile imaging unit as follows:

> The mobile imaging unit 120 **may include** medical diagnostic equipment, such as MR (magnetic resonance) imaging equipment, CT (computerized tomography) imaging equipment, and/or ECG (electrocardiogram) equipment, as examples. The mobile imaging unit

[1] *See, e.g.*, Application, at pages 1-2 (emphasis added).

120 **may also include** paramedic equipment, such as first aid equipment, cardiac equipment, and/or life support equipment, for example.[2]

The Specification defines the contents of the healthcare facility similarly:

> The healthcare facility 240 is preferably a hospital, a medical clinic, a doctor's office, some other medical office, or any other terminal, for example. **The healthcare facility 240 may include medical diagnostic imaging equipment, such as MR imaging equipment, CT imaging equipment, and/or ECG equipment, as examples. The healthcare facility 240 may also include patient treatment equipment, such as first aid equipment, cardiac support equipment, and/or life support equipment, for example.**[3]

Thus, the specification draws many parallels between the mobile imaging unit and the healthcare facility, except that the mobile imaging unit may move geographically and may, for example, be positioned outside of one healthcare facility on one day and outside another healthcare facility on another day. Clearly, this is not the capability of a wheeled cart.

The Specification further provides:

> As described above in relation to Figure 1, the mobile imaging unit 220 facilitates medical diagnostic examination of a patient (for example, a MR or CT scan). Data from the medical diagnostic examination (for example, an image) may be transmitted to the data center 210 via the mobile imaging unit/data center communication interface 230. The data center 210 may then store the examination data for later access by the healthcare facility 240 or the mobile imaging unit 220, for example. Then, a user at the healthcare facility 240 may access the examination data from the data center 210 via the healthcare facility/data center communication interface 250. In a preferred embodiment, "dumb" terminals (e.g., a keyboard and display without advanced processing power) at the healthcare facility 240 may access the examination data from the data center 210 via the healthcare facility/data center communication interface 250. Operators such as healthcare professionals (for example, physicians, radiologists, etc.) may view the mobile imaging unit 220 examination results at the healthcare facility 240 by accessing the data center 210. Examination results may be viewed using a DICOM translation and viewing program, for example. **The physical locations of the mobile imaging unit 220, data center 210, and healthcare facility 240 do not**

[2] *See id.* at page 8 (emphasis added).
[3] *See id.* at page 10 (emphasis added).

adversely impact the operation of the preferred embodiments of the present invention.[4]

Thus, as shown, for example, in Figure 2, the healthcare facility, the mobile imaging unit, and the data center are separate elements that can be located at a plurality of locations.

Even further, the Specification provides:

> Figure 7 shows a flowchart 700 for integrating mobile imaging units 220 into an application service provider for data storage and information system support in accordance with the remotely accessible centralized medical image data storage system of Figure 2. First, at step 710, **the mobile imaging unit 220 is preferably positioned near the healthcare facility 240**. Next, at step 720, an examination, such as a MR imaging scan, for example, of a patient is performed at the mobile imaging unit 220.[5]

Again, this paragraph emphasizes the relationship between the mobile imaging unit and the healthcare facility and the view of the mobile imaging unit as a mobile facility usable apart from and along with the healthcare facility, as opposed to an imaging scanner for use as a component within the healthcare facility. On the contrary, both the mobile imaging unit and the healthcare facility, as discussed above, include such components.

Further, the Specification provides an example illustrating the mobile, vehicular nature of the mobile imaging unit as a mobile facility as opposed to the stationary healthcare facility.

> As an example, a mobile imaging unit M1 may be servicing healthcare facilities H1 and H2. **First, mobile imaging unit M1 may be positioned at healthcare facility H1.** Mobile imaging unit M1 may examine patients at healthcare facility H1 and perform, for example, CT scans of patients. **Next, mobile imaging unit M1 may be requested at healthcare facility H2.** Rather than physically transporting patient examination results to healthcare facility H1, **mobile imaging unit M1 may upload patient examination results to a data center D1 while traveling to healthcare facility H2**, for example, by a wireless communication interface. Users at the healthcare facility H1 may view the patient examination results via the data center D1 at any time.

[4] *See id.* at pages 10-11 (emphasis added).
[5] *See id.* at page 15 (emphasis added).

Meanwhile, the mobile imaging unit M1 may examine additional patients at the second healthcare facility H2.[6]

Even further, as originally claimed, healthcare facilities and mobile imaging units were recited as different instances of data generators and/or data retrievers.

From the specification and the claims, it is clear that the mobile imaging unit is a mobile facility, such as a large truck or van, that **includes** medical diagnostic equipment, such as MR (magnetic resonance) imaging equipment, CT (computerized tomography) imaging equipment, and/or ECG (electrocardiogram) equipment, as examples.[7] The mobile imaging unit may also **include** paramedic equipment, such as first aid equipment, cardiac equipment, and/or life support equipment, for example.[8] The equipment included in the mobile imaging unit could definitely include the wheeled ultrasound cart of the Wood '035 patent, but the mobile imaging unit as described in the present application is clearly different and patentably distinct from the wheeled ultrasound cart of Wood '035.

The mobile imaging unit is defined in the specification as a mobile imaging facility, **for example a truck or van**, that may be positioned outside a healthcare facility.[9] The mobile imaging unit facilitates medical diagnostic examination of a patient (for example, an MR or CT scan).[10] The healthcare facility and the mobile imaging unit are defined as two examples of imaging facilities.[11] Data from the medical diagnostic examination (for example, an image) is transmitted to the data center via the mobile imaging unit/data center communication interface.[12] The data center may store the examination data for later retrieval by the mobile imaging unit or other entity.[13] Additionally, the medical imaging unit may access medical applications via the data center.[14]

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[6] *See id.* at pages 16-17 (emphasis added).
[7] *See id.* at page 3, paragraph 30.
[8] *Id.*
[9] *See id.* at page 1, paragraph 3.
[10] *See id.* at page 3, paragraph 31.
[11] *See id.* at page 17.
[12] *Id.*
[13] *Id.*
[14] *Id.*

As shown in Fig. 2, the ultrasound system of Wood '035 is illustrated on a mobile cart. The ultrasound system of Wood '035 is not a **mobile facility** adapted to be used at a plurality of locations, as recited in claim 21, as amended in the Office Action Response of Feb. 8, 2006.[15] Wood '035 does not teach or fairly suggest at least "a mobile imaging unit including medical imaging equipment, wherein said mobile imaging unit is **a mobile facility** adapted to be used at a plurality of locations." Rather, Wood '035 simply discloses the medical imaging equipment that can be **included** in the mobile imaging facility. Even though the ultrasound system may have wheels, it is still medical imaging equipment and not a mobile facility including medical imaging equipment. Additionally, Wood '035 does not disclose "a mobile imaging unit/data center communication interface allowing medical information to be transmitted between said mobile imaging unit and said data center" for at least the reason that Wood '035 simply does not disclose a mobile imaging unit as recited in claim 21.

A description of various embodiments and various alternatives is sufficient description of the meanings of mobile imaging units, and the Applicant is entitled to at least those disclosed embodiments and their equivalents. The claims are to be interpreted in light of the specification, and the Applicant is entitled to be his or her own lexicographer in defining and describing the claimed terms. The meaning of the term "mobile imaging unit" is clear in the specification to a person skilled in the art, and the Examiner should fairly rely on that meaning in interpreting the claims in view of the prior art. *See, e.g.*, MPEP 6801.01(o).

Furthermore, the meaning of every term used in a claim should be apparent from the prior art or from the specification and drawings at the time the application is filed. MPEP 2173.05(a). Here, the meaning of the term "facility" is clear from the specification. The specification describes the mobile imaging unit as including medical and other equipment, such as the imaging equipment described in Wood '035. The specification discusses the mobile imaging unit as a mobile extension of a healthcare facility, designed to take some of the burden and patient load away from the healthcare facility and designed to be mobile such that it can travel between healthcare facilities.[16]

[15] The Office Action Response filed on February 8, 2006.
[16] *See, e.g.*, Application at pages 17-18.

No one is getting into, being examined in, or traveling in the wheeled ultrasound cart of Wood '035.

B. The Term "Facility" as Defined in the Dictionaries supports the Construction Advanced by the Applicant

In the Findings of Fact, the Board indicates that the specification of the present application does not provide a definition for the "facility" in the term "mobile facility" recited in claims 1, 3-9, 11-14, 16-17 and 19-36. Correspondingly, the Board looked to Webster's II New Riverside University Dictionary (1984) to define a facility as "3. *often* facilities. Something that facilitates an action or process. 4. Something created to serve a particular function <a new mental health *facility*>". See page 5 of the Decision on Appeal (emphasis in original). The Applicant notes that part 4 of this definition refers to a mental health facility, which is obviously a unit, such as a building, which accommodates people, equipment, etc. A mental health facility conjures up images of a location to be entered and visited, not a cart on wheels.

Furthermore, as previously cited by the Applicant, Merriam-Webster's Medical Dictionary defines a facility as "something (as a hospital) that is built, installed, or established to serve a particular purpose.[17] The American Heritage Dictionary defines a facility as "something created to serve a particular function: *hospitals and other health care facilities*."[18] Dictionary.com defines a facility as "something designed, built, installed, etc., to serve a specific function affording a convenience or service: *transportation facilities; educational facilities; a new research facility.*"[19] These definitions all use a hospital and/or other building as an example in the definition. As such, a cart on wheels is not something that can be entered or visited like a transportation facility, an educational facility, a research facility, or a mobile imaging facility, which would reasonably be viewed to fit this definition in the eyes of one of ordinary skill in the art. Additionally, the Applicant, through amendment and argument in the prosecution

[17] Merriam-Webster's Medical Dictionary, 2000 edition.
[18] American Heritage Dictionary, Fourth Edition, 2000 (emphasis in original).
[19] Dictionary.com Unabridged (v 1.1), based on the Random House Unabridged Dictionary, 2006 (emphasis in original).

history, has disclaimed such a claim scope as would cover a cart on wheels rather than a facility that is capable of being moved, such as a truck or van.

For at least these reasons, Applicant respectfully submits that the pending claims should be in condition for allowance over the cited art, as the Examiner's rejections do not hold up absent an over-reaching construction of the disclosure of Wood '035. Thus, the Applicant requests rehearing and reconsideration of the support for the mobile facility and therefore the sustainability of the Examiner's current rejections, which depend on such a construction.

CONCLUSION

For the foregoing reasons, claims 1, 3-9, 11-14, 16-17 and 19-36 are distinguishable over the prior art of record. Thus, the Applicant respectfully requests a reversal of the Examiner's rejection and issuance of a patent on the present application. If an Examiner or Applicant's amendment to clarify this claim scope would expedite the allowance of the pending claims, the Applicant would be amenable to discussing such a course of action. The Applicant reserves the right to address other issues raised in the Board's decision and/or the Office Action at a later date (e.g., in an RCE or continuation application). The Commissioner is hereby authorized to charge any additional fees or credit any overpayment to the deposit account of GEMS-IT, Account No. 504540.

Respectfully submitted,

Dated: April 30, 2008

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